#### STATE OF NEW JERSEY

Comments of the State of New Jersey on EPA's "Response to the September 2010 Section 126 Petition from New Jersey Regarding SO<sub>2</sub> Emissions from the Portland Generating Station," 76 Fed. Reg. 19,662 (April 7, 2011)

June 13, 2011

#### I. Introduction

The State of New Jersey ("New Jersey") appreciates this opportunity to submit comments on the United States Environmental Protection Agency's ("EPA") proposed rule concerning New Jersey's September 17, 2010 petition submitted pursuant to Section 126 of the Clean Air Act ("Act"), 42 U.S.C. § 7426<sup>1</sup>. New Jersey commends EPA for proposing to grant this petition, which concerns unlawful emissions from the GenOn REMA, LLC ("GenOn") Portland Generating Station ("Portland") located in Pennsylvania. New Jersey's petition demonstrates through air quality modeling analyses that Portland's emissions significantly contribute to nonattainment and interfere with maintenance of the 1-hour sulfur dioxide (" $SO_2$ ") national ambient air quality standard ("NAAQS") in New Jersey. In fact, New Jersey's petition shows that Portland's emissions cause exceedances of this 1-hour SO<sub>2</sub> standard.

EPA's proposal to grant New Jersey's petition demonstrates EPA's commitment to addressing the significant public health threats that are associated with  $SO_2$  emissions, see 76 Fed. Reg. 19,666. EPA's proposal also

 $<sup>^{1}</sup>$  <u>See</u> "Response to the September 2010 Section 126 Petition from New Jersey Regarding SO<sub>2</sub> Emissions from the Portland Generating Station," 76 Fed. Reg. 19,662 (April 7, 2011).

<sup>&</sup>lt;sup>2</sup> EPA is not addressing New Jersey's May 12, 2010 petition in this proposal. <u>See</u> 76 Fed. Reg. 19,665. New Jersey notes that the statutorily prescribed 60 day deadline applicable to the May petition, as well as the six month extension allowed by 42 U.S.C. § 7607(d)(1), have passed. EPA also indicated at the public hearing on April 27, 2011 that it would finalize its proposal in September 2011. A final action on New Jersey's September 2010 petition by this date is also beyond the statutorily required deadlines of the Act.

demonstrates its recognition of the nondiscretionary statutory obligation under Section 126 of the Act to prohibit an upwind source from significantly contributing to nonattainment or interfering with maintenance of a NAAQS in a downwind state.

New Jersey is committed to protecting the public health of its residents. Portland's emissions directly and adversely impact New Jersey's citizens and environment, especially given the close proximity of the plant to New Jersey. New Jersey is therefore fully supportive of EPA's proposed decision to grant New Jersey's petition and directly regulate the Portland plant.

# II. EPA Should Require Portland To Shut Down Within Three Months or Require Greater Emission Reductions in a Shorter Time Frame

Based on EPA's proposed finding of Section 126 violations at Portland, EPA must require the coal units at this plant to shut down within three months of EPA's final rule in order to abate the adverse health and environmental effects from  $SO_2$  emissions and not allow the operation of the plant until it mitigates its unlawful impacts. See 42 U.S.C. § 7426(c)(2) (it is a violation of Section 126 of the Act for any major existing source to operate more than three months after a finding by EPA).

EPA can only allow the continued operation beyond three months at Portland if Portland "complies with ... emission limitations and compliance schedules (containing increments of progress) as may be provided by Administrator to bring about compliance with the requirements in ... this section as expeditiously as practicable, but in no case later than three years after 42 U.S.C. § 7426(c)((2). the date of such finding." Further, EPA should require GenOn to achieve additional emission reductions and to achieve them sooner than proposed in order to satisfy the Act's "as expeditiously as practicable" requirement and for the protection of public health. In order to allow Portland to continue to operate and come into compliance with Section 126 of the Clean Air

<sup>&</sup>lt;sup>2</sup> New Jersey expects EPA to issue a final decision no later than September 2011 based on EPA's representation at the public hearing on April 27, 2011.

Act as expeditiously as practicable, New Jersey outlines in these comments the measures that EPA should require<sup>3</sup>. EPA's proposed limits and time frames are not sufficient for the attainment of the 1-hour  $\rm SO_2$  NAAQS or to remedy the Section 126 violations here. In contrast, the following time line and emission reductions will bring the Portland plant into compliance with Section 126 and are based upon New Jersey's modeling and proven measures at other coal-fired power plants.

Specifically, within three months of EPA's final rule, EPA should require Portland to reduce its emissions by between 80%-95%. Only if a 95% reduction is shown to be infeasible by GenOn should a lesser interim reduction rate be approved, and such lesser rate should be no less than 80%. Within one year, EPA should require Portland to reduce its  $SO_2$  emissions by, at a minimum, 95% to ensure sufficient protection of the public's health. If 95% emission reductions are not achieved, Gen On must demonstrate they have taken all practicable measures to minimize  $SO_2$  emissions in this time frame. In addition, GenOn should be required to continue to implement measures to achieve 95%  $SO_2$  reduction as expeditiously as practicable.

The following comments detail how Portland can achieve at least 95% emission reductions in less than three years, as well as 80-95% emission reductions in the short term.

<sup>&</sup>lt;sup>3</sup> Summary of Recommended Interim and Longer Term Emission Reduction Requirements:

<sup>(1)</sup> Within 90 days, 80% reduction in the maximum hourly  $SO_2$  emission rate or shut down the coal boilers.

<sup>(2)</sup> Within 90 days to one year, further minimize  $SO_2$  emissions and achieve 95% reductions if feasible. If such emission reductions are not achieved, GenOn must demonstrate it has taken all practicable measures to minimize  $SO_2$  emissions in this timeframe.

<sup>(3)</sup> Within one year to three years (if  $95\%~SO_2$  reductions are not achieved in the first year), GenOn must continue to implement measures to achieve  $95\%~SO_2$  reduction as soon as possible, but no longer than the maximum three year timeframe required by Section 126.

<sup>(4)</sup> Within three years, Portland must cease operation of the coal units if 95% SO<sub>2</sub> reductions have not been achieved.

<u>See</u> Sections III and IV. If the coal units at Portland do not meet these reduced emission rates within these time frames, EPA should require that these units cease operation until they do meet these emission rates, but Portland in no circumstance has longer than three years from EPA's final rule to come into compliance with Section 126 and continue to operate.  $42 \text{ U.S.C.} \S 7426(c)((2).$ 

### III. Emission Reductions of At Least 95% are Warranted and Feasible

New Jersey strongly supports EPA's proposal to grant The emission limits that Jersey's petition. proposes to require, however, are not consistent with the results of NJDEP's modeling, are inadequate to reach and maintain attainment of the 1-hour SO<sub>2</sub> standard, therefore are inadequate to fully protect the public health in New Jersey and Pennsylvania. New Jersey's modeling demonstrates that between 89% (based on AERMOD predictions) and 95% (based on CALPUFF predictions) emissions reductions from allowable emissions are needed to reduce air quality concentrations to barely attain the air quality standard. The EPA should therefore ensure emissions reductions at Portland by at least 95% in order to provide certainty that public health will be protected. Application of New Jersey's adopted sulfur dioxide emission limit of 0.150 pounds per million BTU would result in a 95% reduction of sulfur dioxide at Portland. Based on New Jersey's analysis, at least a 95% reduction is also required to maintain the NAAQS.

## A. EPA's definition of Portland's "significant contribution"

"as those emissions that must be eliminated to bring the downwind receptors in New Jersey affected by the Portland Plant into modeled attainment in the analysis year." 76 Fed. Reg. 19,667. EPA also specifically seeks comment on its methodology with respect to the "interference with maintenance" prong of Section 126. Id. at 19,668. EPA is required to ensure sufficient emission reductions to ensure maintenance of NAAQS. See North Carolina v. EPA, per curiam, 531 F.3d 896, 910 (D.C. Cir. 2008)("[a]n outcome that fails to give independent effect to the 'interfere with maintenance' prong violates the plain language of section 110(a)(2)(D)(i)(I)"). EPA has an affirmative duty

to regulate sources that contribute significantly to NAAQS exceedances in a nonattainment area or interfere with maintenance of NAAQS in an attainment area. <u>See id.</u> at 908.

New Jersey agrees with EPA's proposal that the emissions limit has to be assigned to each individual unit and cannot be a combined limit, see 76 Fed. Reg. 19,676, because NJDEP's modeling predicted NAAQS violations from emissions at each coal unit. For the same reason, the emissions limit cannot be met by over controlling one unit, or by shutting down just one unit. Both units need to shut down or to operate with modern control measures that achieve at least 95% control efficiency. However, shutting down one unit could be utilized as an interim measure.

B. NJDEP's Modeling Analyses, EPA's Modeling Analysis, and Monitoring Data Collected Near Portland All Demonstrate NAAQS Exceedances

EPA found that "due to the magnitude of the modeled violations in the NJDEP AERMOD modeling, the NJDEP modeling was sufficient to make a finding that the Portland Plant significantly contributes to nonattainment and interferes with maintenance in New Jersey." 76 Fed. Reg. 19,673. results from New Jersey's modeling analyses using both CALPUFF and AERMOD and the results from EPA's modeling analysis all show violations of the 1-hour SO2 standard in New Jersey and Pennsylvania due to Portland's emissions. AERMOD confirms the findings of CALPUFF and similarly shows NAAQS violations, and the monitoring results corroborate the modeling analyses. EPA should accordingly issue a final rule granting NJDEP's petition. But the level of emission reductions should be based on NJDEP's CALPUFF analysis to ensure maintenance of the NAAQS and certainty of public health protection.

The following table summarizes the calculated  $SO_2$  reductions needed from the Portland Plant's current allowable emission rates as predicted from each of the modeling scenarios performed by NJDEP.

Comparison of Modeled SO<sub>2</sub> Emission Reductions

Model	Meteorological Data	Required SO <sub>2</sub> Reduction
CALPUFF	2002	95
CALPUFF	2003	92
CALPUFF	July 1992 - June 1993	94
AERMOD	NJDEP: July 1993 - June 1994	89
AERMOD	EPA: July 1993 - June 1994	81

modeling results are corroborated by recent monitoring. A  $SO_2$  air quality monitor located 1.2 miles northeast of the coal-fired Portland Power Plant Knowlton Township, Warren County, New Jersey at Columbia Lake Wildlife Management Area began operation in Between September 23, 2010 and June 6, September 2010. 2011, the monitor measured 1-hour  $SO_2$  concentrations that exceeded the 1-hour SO<sub>2</sub> NAAQS threshold on 18 days. These monitoring results are also consistent with the results of EPA's modeling analyses, NJDEP's and showing a correlation between the modeling analyses and monitoring data. NJDEP also performed a trajectory analysis to evaluate the cause of the high monitored concentrations that exceeded the 1-hour SO<sub>2</sub> NAAQS during four episodes when concurrent hourly emissions data was available. See Analysis of the Sulfur Dioxide Measurements from the Columbia Lake NJ Monitor, March 4, 2011, Bureau of Technical Services, Division of Air Quality, NJDEP. analysis found that Portland Power Plant Units 1 and 2 were the cause of each high SO<sub>2</sub> episode at the monitor. NJDEP submitted the results of the monitor and its trajectory analysis to EPA.

Accordingly, monitoring data and all modeling analyses support EPA's proposed finding that emissions from Portland are causing, significantly contributing to nonattainment, and interfering with maintenance of 1-hour  $\mathrm{SO}_2$  standard in New Jersey.

C. The NJDEP Model Validation Has Shown That CALPUFF Will Produce More Reliable Predictions In This Case

EPA explains that pursuant to the regulations at Section 7.2.8 of Appendix W to 40 CFR Part 51, the CALPUFF model may be used for "near-field" applications involving

"complex winds." 76 Fed. Reg. 19,670. Specifically, CALPUFF may be used "if a statistical performance evaluation has been conducted using measured air quality data and the results of that evaluation indicate the alternative model performs better for the given application than a comparable model in Appendix A." See Section 3.3.2, condition 2 of Appendix W to 40 CFR Part 51. New Jersey submitted a model validation study demonstrating that CALPUFF produced better predictions of measured SO<sub>2</sub> concentrations than AERMOD in the vicinity of the Portland Power Plant using the Martins Creek model validation Therefore, the results of the CALPUFF modeling database. should be used as the basis for EPA's proposed remedy for Portland. Based on the CALPUFF results, a 95% emission reduction (maximum emission rate of 0.150 lb/mmbtu) in Unit 1 and 2's allowable emission rate is at a minimum demonstrated.

Moreover, CALPUFF should be used to model Portland's emissions due to the terrain and complex winds and the availability of detailed meteorological data that is not routinely available in most situations. In less complex situations, <u>e.g.</u>, areas without complex winds and without robust meteorological data, AERMOD is the first model of choice. A detailed response to EPA's comments on NJDEP's Model Validation Study is contained in Appendix A.

# D. EPA's Adjustments to Meteorological Data Used For AERMOD Modeling

NJDEP's AERMOD modeling utilized a meteorological dataset that has been historically used in regulatory applications to model emission sources at Portland. However, EPA made several modifications to this meteorological data when it modeled Portland's emissions. Some of EPA's modifications are unsupported and may result in the impacts of emissions from the Portland plant being under-predicted. One modification is the inclusion of the sigma-w data (standard deviation of vertical wind velocity fluctuations) measured by the SODAR at the Portland meteorological site. Use of the SODAR sigma-w has not been validated in AERMOD and deviates from all previous permit and SIP modeling analyses conducted with this meteorological data. In Appendix B NJDEP explains fully the historical precedence of the meteorological data it used in its AERMOD modeling and the concerns with EPA's modifications to NJDEP's meteorological dataset, including

EPA's land use characterization resulting in 40% less peak concentration, in Appendix B.

### E. The Proposed Remedy Must Have a Margin of Safety

There is a natural variation in the meteorological conditions at a site from year to year. The predicted AERMOD concentrations used for the proposed remedy were based on meteorological conditions that occurred during one year (July 1, 1993 to June 30, 1994). However, there is a very high likelihood that use of another year's meteorological conditions in the modeling would produce higher predicted  $SO_2$  concentrations. Given the uncertainty and the range of meteorological conditions from year to year, it is recommended that a margin be added to any remedy based on AERMOD to ensure maintenance of the NAAAQS. Requiring 95% reduction provides such a margin to ensure protection of health. Without an adequate safety margin built into the required reduced emission rates, NAAOS violations could continue depending upon the meteorological conditions of different year(s).

### IV. Interim Reductions Should Minimize SO<sub>2</sub> emissions As Soon As Possible

Within 90 days EPA should require Portland to achieve an 80% reduction in the maximum hourly  $SO_2$  emission rate or shut down the coal boilers. Within 90 days to one year - GenOn must further minimize  $SO_2$  emissions and achieve 95% reduction if feasible. If not achieved, GenOn must demonstrate they have taken all practicable measures to minimize  $SO_2$  emissions in this timeframe.

EPA proposes to require Portland to meet interim emission limits within one year. 76 Fed. Reg. 19,677. There are proven, short term emission reduction measures that can significantly reduce  $SO_2$  emissions at Portland in substantially less than one year. Given the extent of the exceedances of the NAAQS, emission reductions in the shortest possible timeframe are appropriate for the protection of public health. New Jersey agrees with EPA that dry reagent injection (DRI) can be installed within less than a year and will likely achieve at a minimum 50% emission reductions at Portland. However, based on experience at New Jersey facilities, even greater shorter term emission reductions between 80-95% are possible. The EPA should require the combination of an immediate

reduction of maximum coal burned per hour, use of the lowest sulfur coal available as soon as possible, and a dry reagent injection system as soon as possible.

A. Switching to Low Sulfur Coal Could Result In over 90% Reduction Within 90 Days

Switching to lower sulfur coal would dramatically cut SO<sub>2</sub> emissions and could happen very quickly (e.g., within 90 days). At PSEG Fossil LLC's Hudson Generating Station (Hudson) in New Jersey, the facility was required to use ultra low sulfur coal. Hudson switched to an ultra low sulfur coal with a reported sulfur content of approximately 0.1% sulfur. Hudson was required to burn 100% ultra low sulfur coal with an  $SO_2$  limit of 0.216 lb/mmBtu until the installation and commencement of operation of a scrubber. EPA was party to the Consent Decree that resulted in this requirement. Because Portland uses approximately 2% sulfur coal, which is about 3 pounds SO<sub>2</sub> per million Btu, coal switching alone could result in over 90%  $SO_2$  emission reductions. If this ultra low sulfur coal is not available for use at Portland, GenOn should obtain the next lowest sulfur coal available that can be burned at Portland. GenOn should be required to document to EPA and the public that it will use the lowest sulfur coal available.

According to the Energy Information Administration's Monthly Utility and Nonutility Fuel Receipts and Fuel Quality Data (EIA-923), http://www.eia.gov/cneaf/electricity/page/eia423.html, in 2008 Portland imported 919,715 tons of coal from four western Pennsylvania and West Virginia mines with a weighted average of 1.88% sulfur. Upon burning, this resulted in a release of 34,650 tons of SO<sub>2</sub> at a rate of approximately 3.1 lb/mmBTU.

In 2010, Portland imported 638,865 tons of coal from a single western Pennsylvania mine with a weighted average of 1.79% sulfur. The 2010 rate as reported to EPA's CAMD database was 2.82 lb/mmBTU. EIA-923 data indicates that lower sulfur coal is also available in West Virginia. In 2010, seven West Virginia mines produced 3,233,503 tons of bituminous coal with sulfur contents ranging from 0.14% to 0.37%. Such coals burned at Portland could lower  $SO_2$  emissions by 92% to 77%, respectively. Considering Portland has obtained coal from West Virginia in the past,

and West Virginia has the potential capacity to supply Portland's demand, this option is reasonable and feasible. We note this as an example of the availability of much lower sulfur coal but it is not the only possible source.

B. Dry Sorbent Injection In Combination With Low Sulfur Coal Could Achieve Even Greater Reductions

In addition to using lower sulfur coal, Portland could also install dry sorbent injection (DSI) within much less than a year and achieve even greater  $\rm SO_2$  reductions. This is useful if ultra low sulfur coal, such as used by the PSEG Hudson unit, is demonstrated to not be available for use at Portland.

DSI temporary systems can be installed and operational in a matter of days. In addition, according to Jim Staudt of Andover Technology Partners, permanent systems can be installed and operational in a matter of months; much less than one year. GenOn should determine if DSI is feasible for SO<sub>2</sub> reduction by installing a temporary system immediately and if determined effective at reducing SO2 emissions, it should operate either a temporary or permanent system as soon as possible. EPA should require that the DSI system be in place within 90 days, unless GenOn demonstrates this is infeasible and EPA grants a longer timeframe, but in no event no longer than one year. As part of the determination of DSI feasibility, GenOn should conduct particulate testing at different operating loads and ensure that the reductions in hourly heat inputs of coal for SO2 reduction is also sufficient to avoid any increases in maximum particulate emissions.

Following are examples of  $SO_2$  emission reductions achieved with DSI.

1. A technical report by the Northeast States for Coordinated Air Use Management (NESCAUM), "Control Technologies to Reduce Conventional and Hazardous Air Pollutants from Coal-Fired Power Plants" dated March 2011 indicates that DSI using Trona can achieve varying levels of controls – in the range of 30-60% SO<sub>2</sub> emission reductions – when injected upstream of an Electrostatic Precipitator (ESP), which is the particulate matter control installed at Portland, or up to 90% reduction when injected upstream of a fabric filter.

- 2. The PHI Company Edge Moor Plant, Units 3 & 4, in Delaware utilizes DSI and achieves  $SO_2$  emission reductions from 1.2 lbs/mmBtu to 0.37 lbs/mmBtu, which is a 69% control efficiency.
- 3. Performance tests at the Dunkirk and Huntley stations in New York indicate that the installed controls can reduce:  $SO_2$  emission by 55% within 12 months; mercury emissions by more than 90%; and PM emissions to less than 0.010 lbs/mmBtu.
  - C. Reducing The Amount of Coal Burned Per Hour Should Be Required Immediately

Reduced maximum hourly heat input at Portland would significantly reduce emissions immediately. A 20% reduction in hourly coal use would reduce hourly  $SO_2$  emissions by 20%. This would also reduce the maximum flue gas flow rate by 20%, resulting in particulate emissions reductions by greater amounts, probably by over 50%. This may be necessary to avoid particulate emission increases with dry reagent injection. Portland should reduce its hourly amount of coal burned (the maximum hourly heat input) in each unit by at least 20% immediately. Additionally, shutdown of one of the units can be considered as part of a required 80% interim reduction of  $SO_2$ .

# V. Modern Control Technology Can Achieve Over 95% Reduction of SO<sub>2</sub> Emissions

Based on New Jersey regulations and emission reductions at other facilities, over 95% emission reductions at both Units 1 and 2 within three years or less are feasible and reasonable. If Portland does not achieve the necessary emission reductions, EPA should require Portland to shut down within three months of EPA's final finding in accordance with the Act. 42 U.S.C. § 7426(c)(2).

New Jersey regulations, N.J.A.C. 7:27-10.1 et seq., require its coal-fired power plants, after December 15, 2012, to achieve an emission rate of 0.150 pounds per million Btu based on a 30 day average. Assuming a 2% sulfur coal is combusted, this limit amounts to 95% control efficiency at Portland.

PSEG Fossill LLC's Hudson Generating Station Unit 2 and Mercer Generating Station Units 1 and 2 are achieving an  $SO_2$  emission rate of less than 0.150 lb/mmBtu 30-day average. EPA is party to the Consent Decree that specifies this emission limit. New Jersey has also incorporated this limit into its rules so it applies to all New Jersey coalfired power plants.

Another method available to achieve over 95% sulfur dioxide reductions includes converting to natural gas. New Jersey's RC Cape May LLC's Deepwater facility switched to natural gas and achieved 99% emission reductions.

- VI. EPA Does Not Have Discretion Under The Act To Delay Action On a 126 Petition Even Though a State Implementation Plan Submission Deadline Has Not Passed
  - A. Section 126 of the Act Sets Forth Strict Deadlines For Compliance

In its proposed rule, EPA explains that remedies pursuant to a Section 126 petition in certain situations must be promulgated prior to the date a State Implementation Plan ("SIP") is due after a NAAQS is promulgated or revised. See 76 Fed. 19,665. EPA's promulgation of the 1-hour  $SO_2$  NAAQS, see 75 Fed. Reg. 35,520 (June 22, 2010), triggered States' obligations to submit a SIP addressing how the state will attain the NAAQS. 42 U.S.C. § 7410.

Pennsylvania, like other states, will be required to submit a 1-hour  $SO_2$  SIP in February 2014 that provides for attainment of this new NAAQS by August 2017. See 42 U.S.C. § 7514a(a)(providing that the SIP must provide for the attainment of the applicable NAAQS, which must occur as expeditiously as practicable but in no case later than five years from the effective date of the nonattainment designation). The August 2017 attainment deadline is well beyond the maximum statutory deadline applicable to New Jersey's Section 126 petition (2014).

Pursuant to Section 126, once EPA finds that a source violates the Act, it must require abatement from that source within three months, or it may permit the continued operation of a violating source beyond three months if the source complies with "emission limitations and compliance schedules (containing increments of progress) as may be

provided ... to bring about compliance ... "as expeditiously as practicable, but in no case later than three years after the date of such finding." 42 U.S.C. § 7426(c). See also 40 C.F.R. §§ 50.4, -.5 and -.7. The Administrator may allow the source to operate beyond the three month time frame only if the source complies with emission limitations and compliance schedules (containing increments of progress) as the Administrator may direct to bring about compliance. 42 U.S.C. § 7426(c). Here, EPA is proposing to require Portland to meet certain SO2 emission limits for Units 1 and 2 by no later than three years after the effective date of the final rulemaking (i.e., by 2014) and interim emission limits within a year. Any compliance schedule, including one that waits for the SIP process, that allows for the continued operation beyond three years from the date of EPA's finding without full compliance with Section 126 is unlawful. 42 U.S.C. § 7426(c).

Moreover, the SIP process is more complex and time-consuming than the Section 126 process. Pursuant to Section 110, action may be taken on a group of sources that are contributing to a violation and emission reductions are allocated to various sources only after planning and rulemaking. In addition, the Act's SIP deadline for attainment is the maximum time allowed, and the deadline could be sooner (<u>i.e.</u>, "as expeditiously as practicable"). See 42 U.S.C. § 7514a(a). Hence, it is appropriate and reasonable that a Section 126 petition remedy provide for attainment in advance of the maximum time frame for SIP attainment, especially against a single source where the evidence demonstrates that it alone violates the NAAQS.

EPA's recognition that it may not delay remedial action here is also consistent with its 1999 Section 126 petition findings. 64 Fed. Reg. 28,250(May 25, 1999) In that action, EPA found that Section 126(c) establishes a maximum three-year period for implementation of controls regardless of "the timing of attainment needs downwind." 64 Fed. Reg. at 28,279. "Congress made it clear that it intended Section 126 to provide an additional means of attacking interstate pollution that would supplement, not replace, the SIP requirement."

Similarly, in <u>Appalachian Power Co. v. EPA</u>, 249 F.3d 1032, 1046 (D.C. Cir. 2001), the Court explained that under Section 110, EPA determines the required level of air quality, but defers in the first instance to the states on

how to achieve that level. Id. In contrast, Section 126 contemplates direct EPA regulation of sources within a Id. The D.C. Circuit further explained that both state. sections are independent upon each other, agreeing with the Second Circuit that "an argument that one proceeding must be completed as a prerequisite to a final decision in the other makes no sense." Id. at 1047. The Court ultimately deferred to EPA, finding EPA's 2000 126 findings reasonable that "Congress provided both [provisions] without indicating any preference for one over the other." 1048 (citing 65 Fed. Reg. 2674, 2680 (January 18, 2000)). For these reasons, Section 126 sets forth nondiscretionary deadlines within which EPA must act, even if a SIP submission deadline has not passed.

B. Section 110 Calls for 126 Remedies to Be Included In a SIP That Is Submitted After a NAAQS Is Promulgated Or Revised

New Jersey also agrees with EPA, see 76 Fed. Reg. 19,665, that EPA may not delay action here because Section 110 requires Section 126 remedies to be included in a SIP submission that is due three years after a NAAQS is promulgated or revised. See 42 U.S.C. § 7410(a)(2)(D)(ii). The Section 110 "good neighbor" provision requires each state's SIP to contain adequate provisions prohibiting any source from contributing significantly to nonattainment in, or interfering with maintenance by, any other State with respect to a NAAQS. Id. Accordingly, New Jersey agrees with EPA that this structure contemplates action on a 126 petition prior to a SIP submission pursuant to Section 110. See 76 Fed. Reg. 19,665 ("the statute requires the State SIP submittal to include any emission limits promulgated by EPA pursuant to Section 126. The fact that Congress required the SIP submittals due 3 years after promulgation or revision of a NAAOS to include any emission limits promulgated pursuant to section 126 is meaningful. Congress had intended to limit EPA's authority to act on Section 126 petitions until after the deadline for States to submit 110(a)(2)D)(i) SIPs, it could have done so"). addition, although the compliance requirement of EPA's action on a 126 petition must be incorporated into the Pennsylvania SIP and Title V major facility operating permit through a major modification of the permit by the Pennsylvania Department of Environmental Protection, these procedural requirements should not delay measures to comply with Section 126.

C. There Are No Assurances That Portland's Section 126 Violations Would Be Remedied Under Pennsylvania's  $SO_2$  SIP

An additional reason that the EPA may not delay remedial action on New Jersey's petition is because there are no assurances that Pennsylvania's SIP for the 1-hour SO2 NAAQS would remedy the Section 126 violations at Portland. In North Carolina v. EPA, 531 F.3d 896, 907-08 (D.C. Cir. 2008), the Court found that EPA has a duty under Section 110(a)(2)(D)(i)(I) to "achieve something measurable toward the goal of prohibiting sources" from contributing to nonattainment or interfering with maintenance in order to meet the requirements of Section 110(a)(2)(D)(i)(I), and that the cap and trade program at issue, with the purchasing of allowances, could lead to no reduction in a source's significant contribution. Similarly here, only with the reduction of emissions at Portland (as opposed to a cap and trade program where sources other than Portland would be controlled) in the time frames required under Section 126 can the 126 violations be remedied.

Moreover, the Pennsylvania Department of Environmental Protection (PADEP) has publicly noticed its proposed designation recommendation for the 1-hour  $SO_2$  NAAQS of "Unclassified" for Northampton County where the Portland Power Plant is located. 41 Pa. Bull. 2283 (April 30, 2011). This notice indicates that the PADEP does not yet recognize EPA's finding that the Portland Power Plant is causing 1-hour  $SO_2$  impacts and provides no confidence that the Pennsylvania SIP will include the necessary controls to timely address the transport of emissions from the Portland Power Plant into New Jersey.

Because EPA finds that New Jersey has demonstrated, and EPA has confirmed, that one source alone causes NAAQS violations in New Jersey, and because the background concentrations are relatively low, see 76 Fed. Reg. 19,667, it is appropriate for EPA to directly regulate this offending source and not delay action until after Pennsylvania submits its SIP.

### VII. EPA's Compliance Schedule Is Not Consistent With The Section 126 Requirement That Compliance Be Achieved "As Expeditiously as Practicable"

In accordance with Section 126(c), it is a violation of a source for which EPA has made a finding under this section to operate more than three (3) months after EPA's finding. 42 U.S.C. § 7426(c)(2). EPA may allow the continued operation of a source after three months of an EPA finding only under certain conditions. Specifically, the source must comply with emissions limitations and compliance schedules (containing increments of progress) that EPA provides to bring about compliance "as expeditiously as practicable," but under no circumstances later than three years after EPA's finding. 42 U.S.C. § 7426(c). EPA has proposed to allow the continued operation of Portland as long as compliance with the established emission limits is satisfied within three years of EPA's final rule. 76 Fed. Req. 19,677. EPA's three year compliance schedule is the maximum time frame allowed under Section 126(c), and a more expeditious schedule is necessary to address this serious public health issue. more expedited time frame is warranted given that residents living in Pennsylvania and New Jersey close to the Portland plant are subjected to unhealthy air quality as a result of this plant. The significant health problems suffered by these citizens are also evident based on the testimony presented at EPA's April 27, 2011 hearing. EPA included such testimony in the rulemaking docket.

If Portland plans to cease operations of the coal burning units, rather than achieve 95% reduction in emissions, shutdown should occur within three months of EPA's final rule. Also, EPA must require the readily available interim emission reductions as explained above that will minimize emissions in the shortest possible timeframes (i.e., as "expeditiously as practicable")..

EPA specifically asks for comments with respect to what criteria should be considered when implementing the "as expeditious as practicable" requirement of Section 126.

First, EPA should explicitly require that GenOn implement emission reduction measures "as expeditiously as practicable" and demonstrate that they are doing so. EPA's 90 day, one year, and three year deadlines should be

maximum timeframes, and GenOn should also be required to implement measures sooner if possible and demonstrate to EPA that they are doing so. The following information demonstrates that greater emission reductions than proposed by EPA are possible in shorter time frames and thus, the following are emission reduction measures that should be required to meet the "expeditiously as practicable" requirement set forth in Section 126. Section III of these comments explains in detail how such emission reductions can be achieved as "expeditiously as practicable."

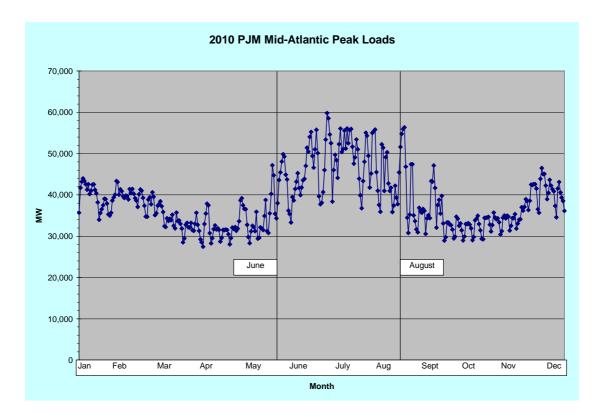
For example, reducing the hourly amount of coal burned can be done immediately. GenOn should be required to do so and to demonstrate that it is minimizing the amount of coal burned within the capacity of the units. Also, GenOn should be required to burn the lowest sulfur coal available as soon as possible.

Also, GenOn can implement DSI in much less than one year and should be required to do so. Use of DSI would correspond to EPA's 50% reduction proposal within one year. GenOn should be required to document what is the soonest timeframe they can implement DSI and be required to do so in that timeframe, provided it is less than one year.

To allow operation beyond 90 days, GenOn should have reduced the amount of coal burned and the sulfur content of that coal, and installed DSI within the 90 day period. If an 80% reduction is not achieved within 90 days, GenOn should shut down the coal units until at least 80% reduction can be achieved. For example, if it takes longer than 90 days to obtain the lowest sulfur coal available, GenOn should not operate the coal units until that coal is on site and used.

The plain language of section 126 presumes a shutdown in 90 days once EPA makes a finding of a Section 126 violation. The provision for longer than 90 days should only be implemented if most emission reductions have been achieved within the 90 days, and more time is needed to achieve additional reductions that are infeasible within the 90 days. If little or no emissions reductions are done within the 90 day timeframe, then a shutdown is appropriate given the serious public health consequences of these emissions.

EPA asked specifically about how reliability and other similar factors should be considered with respect to the "as expeditiously as practicable" requirement. Reliability should not be an issue in this case because 400 MW is a relatively small amount of capacity compared to PJM's current total capacity of 163,500 MW. Also, perhaps more importantly, the timing of EPA's final decision in September is after the peak summer season for electric demand, and there will be eight months until June 2012, when peak summer demand conditions reoccur. (See 2010 PJM Peak Loads Chart below.) Hence, it is unlikely these small coal units would be needed to prevent brownouts or blackouts in this timeframe.



In the unlikely event there is an electric demand situation during this time period where these units are needed to prevent blackouts or brownouts, EPA could include a condition that the units may only be run when called on by PJM to provide power during a Maximum Emergency Generation Event. In no case should the units be run for the economic gain of GenOn while widespread public health exceedances are continuing.

80% minimum reduction within 90 days is recommended to roughly correspond with the lowest modeling prediction. While this is not low enough to prevent all exceedances, it is reasonable for allowing more time to achieve at least the 95% reduction level as soon as possible, but no longer than three years.

In short, EPA cannot delay compliance with Section 126 beyond the maximum time frame set forth in the Act for any reason and must act to ensure that the "expeditiously as practicable" language is given meaning. EPA also cannot rely on the timeframes of other regulations, such as the recently proposed National Emission Standards for Hazard Air Pollutants for coal-fired electric utility steam generating units, to delay Section 126 compliance beyond the maximum three year time frame. Nothing in the statute suggests that EPA has discretion to allow continued operation for any reason beyond the three months to three years timeframe from the date of EPA's finding.

### VIII. Conclusion

New Jersey fully supports EPA's proposed decision to grant New Jersey's September 2010 Section 126 petition and find that emissions from the Portland plant are significantly contributing and interfering with maintenance of the 1-hr SO<sub>2</sub> NAAQS in New Jersey. In this proposal, EPA is taking an important step to stop the unlawful and adverse impact on the citizens and environment of New Jersey due to excessive emissions of air pollutants from this plant. In order to fully abate the Section 126 violations, EPA should require Portland to shut down within three months of its final finding unless emission reductions between 80 and 95% are achieved within 3 months. Short term emission reductions between 80-95% are feasible and warranted. Greater emissions reductions at Portland mean greater public health protection. At a minimum, Portland must reduce its SO<sub>2</sub> emissions by at least 95% within 3 years.